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| APPLICATION N                               | O. FI    | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|---|----------|------------|----------------------|----------------------|------------------|
| 10/612,376 07/01/2003                       |          | 07/01/2003 | John S. Patton       | 0005.15              | 3703             |
| 21968                                       | 7590     | 08/17/2006 |                      | EXAMINER             |                  |
|   | R THERAP |            | KISHORE, GO          | KISHORE, GOLLAMUDI S |                  |
| 150 INDUSTRIAL ROAD<br>SAN CARLOS, CA 94070 |          |            |                      | ART UNIT             | PAPER NUMBER     |
|   | •        |            |                      | 1615                 | -                |

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | Application No.  | Applicant(s)  | _ |
|---|--|--|---|---|
| Office Action Occurrence                                |  | 10/612,376   | PATTON ET AL.   |   |
|   | Office Action Summary  | Examiner   | Art Unit  |   |
|   |  | Gollamudi S. Kishore, Ph.D   | 1615  |   |
| Period fo   | The MAILING DATE of this communication app<br>or Reply   | ears on the cover sheet with the c   | orrespondence address   |   |
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any r | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in an analysis of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).  | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | l. ely filed the mailing date of this communication. O (35 U.S.C. § 133). |   |
| Status  |  |  |   |   |
| 2a)□  | Responsive to communication(s) filed on <u>18 Ap</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E  | action is non-final.<br>nce except for formal matters, pro   |   |   |
| Dispositi   | on of Claims   |  |   |   |
| 5)⊠<br>6)⊠<br>7)□<br>8)□<br>Applicati                   | Claim(s) <u>26-43</u> is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) <u>26-30 and 35-38</u> is/are allowed. Claim(s) <u>31-34 and 39-43</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine   | vn from consideration.   |   |   |
|   | The drawing(s) filed on is/are: a) access applicant may not request that any objection to the correction and the correction of the c | drawing(s) be held in abeyance. See on is required if the drawing(s) is obj  | 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d).                         |   |
| Priority u  | inder 35 U.S.C. § 119  |  |   |   |
| 12) <u></u> a)[   | Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau see the attached detailed Office action for a list of  | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).   | on No<br>d in this National Stage   |   |
| 2) 🔲 Notice<br>3) 🔯 Inform                              | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 4-18-06   | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa  |   |   |

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## **DETAILED ACTION**

The RCE dated 4-18-06 is acknowledged.

Claims included in the prosecution are 26-43.

## **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 31-34 and 39-43 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 28-58 of copending Application No. 10/245,705. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 28 in the copending application are drawn to generic pharmaceutical agent in an amorphous dry powder form having the particle sizes of less than 10 microns and claims 32 and 33 identify insulin as one of the pharmaceutical agents. Claim 41 further identifies the composition

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is a spray dried composition; instant claims drawn specifically to insulin and in specific amounts therefore, are anticipated by the claims of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 31-34 and 39-43 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 26-43 of copending Application No. 10/245,706. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the copending application are drawn to insulin composition in a carrier buffer in a powder form suitable for administration by inhalation. The dependent claim 32 identifies the particle sizes to be less than 10 microns. The dependent claim 28 identifies the buffer to be trehalose, lactose and other sugars. Instant claims are drawn to powdered amorphous insulin compositions with particle sizes below 10 microns and with moisture content of below 10 % containing the same carbohydrate material. The claims in the copending application thus, are generic with respect to the amounts of insulin and the particle sizes and therefore, instant claims are anticipated by the claims in the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 31-34 and 39-43 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 and 13-16 of U.S. Patent No. 6,358,530. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in said patent are drawn to generic

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polypeptide active agent and instantly claimed insulin is a polypeptide and therefore, anticipated by the patented claims. In the patented claims, one of the excipients claims is a carbohydrate and the dependent claim 5 identifies the carbohydrate to be lactose, trehalose and others just as in instant claims. The patented claims are generic with respect to the amount of the polypeptide and instant amounts of insulin are therefore, anticipated by the patented claims. The patented claims do not exclude the presence of buffers such as sodium citrate in instant claims.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 31-33 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platz (5,354,562) of record.

Platz while teaching particles containing insulin and other polypeptide drugs is suggestive of the use of mannitol, and trehalose along with insulin; the particle sizes are between 0.5 to 4 microns (note the abstract and column 2, line 22 through col. 4, line 42). Although in Examples, Platz uses amounts, which are closer to the claimed lower range, on col. 4, lines 42-45, Platz teaches that the milled powder can be formulated neat or with the bulking agents and when the bulking agents are used, they will normally

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constitute about 50 to 99.9 % of the formulation. Therefore it would have been obvious to one of ordinary skill in the art, to choose the desired amount of insulin and the bulking agents since the amount of insulin depends upon the severity of the diabetes in the patient.

7. Claims 34 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platz (5,354,562) in view of Chien (5,042,975), or Markussen (4,946,828), or Hansen (4,614,730) or JP 56 138 110, or JP 56 138 111 by themselves or in combination (all are of record).

Platz has been discussed above. The reference of Platz does not teach the use of citrate as the buffer for insulin. Such a use however, would have been obvious to one of ordinary skill in the art since Chien and Markussen, Hansen and JP 110, JP 111 each teach that these salts are commonly used in combination with insulin and an artisan would expect similar results (note the examples in Chien and Markussen; col. 4, lines 49-54 in Hansen; abstract in JP). One of ordinary skill in the art would be motivated further to use citrate buffers in insulin preparations since JP 56 138 111 teaches that the absorption of insulin is improved by this buffer (note the abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gollamudi S. Kishore, Ph.D whose telephone number is (571) 272-0598. The examiner can normally be reached on 6:30 AM- 4 PM, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Woodward Michael can be reached on (571) 272-8373. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gollamudi S Kishore, Ph.D Primary Examiner

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